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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 11

Complete if Known	
Application Number	09/626,096
Filing Date	July 26, 2000
First Named Inventor	Umek, R.
Group Art Unit	1645
Examiner Name	Not Yet Assigned
Attorney Docket Number	A-68271-2/RFT/RMS/RMK

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	U.S. Patent Document Number	Kind Code[2] (*if known*)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
HGC	1	4,707,352		Stavrianopoulos	11/1987	
	2	4,707,440		Stavrianopoulos	11/1987	
	3	4,711,955		Ward et al.	12/1987	
	4	4,755,458		Rabbani et al.	7/1988	
	5	4,840,893		Hill et al.	6/1989	
	6	4,849,513		Smith et al.	7/1989	
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	8	4,894,325		Englehardt et al.	1/1990	
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	10	4,952,685		Stavrianopoulos	8/1990	
	11	4,994,373		Stavrianopoulos	2/1991	
	12	5,002,885		Stavrianopoulos	3/1991	
	13	5,013,831		Stavrianopoulos	5/1991	
	14	5,082,830		Brakel et al.	1/1992	
	15	5,175,269		Stavrianopoulos	12/1992	
	16	5,241,060		Englehardt et al.	8/1993	
	17	5,278,043		Bannwarth et al.	1/1995	
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HGC	19	EP	0 234 938	A2	Cranfield Inst. of Tech.	2/1987		
HGC	20	EP	0 229 943	B1	Molecular Biosystems Inc.	7/1987		
HGC	21	EP	0 599 337	A2	Canon Kabushiki Kaisha	1/1994		
HGC	22	EP	0 063 879	A2	Yale University	11/1982		
HGC	23	EP	0 515 615		Boehringer Nannheim	9/1996		
HGC	24	CA	2 090 904	A1	F. Hoffman-La Roche	9/1993		
HGC	25	JP	238,166	A	Mitsubishi Corp.	1988	abstract	
HGC	26	JP	6-41183	A2	Mitsubishi Corp.	1994		

Examiner Signature	Date Considered
Heather A. Calamita	5/25/04

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Filing Date	July 26, 2000
First Named Inventor	Umek, R.
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Attorney Docket Number	A-68271-2/RFT/RMS/RMK

Sheet 2 of 11

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MCL	27	5,328,824		Ward et al.	7/1994	
	28	5,403,451		Riviello et al.	4/1995	
	29	5,449,767		Ward et al.	9/1995	
	30	5,472,881		Beebe et al.	12/1995	
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	35	5,591,578		Meade et al.	1/1997	
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MCL	45	WO	86/05815	A1	Genetics International Inc.	3/1985		
MCL	46	WO	90/05732	A1	Columbia Univ.	5/1990		
MCL	47	WO	92/10757	A1	Boehringen Mannheim	6/1992		
MCL	48	WO	93/22678	A2	Mass. Inst. of Technology	11/1993		
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MCL	51	WO	95/15971	A2	Calif. Inst. of Technology	6/1995		
MCL	52	WO	96/40712	A1	Calif. Inst. of Technology	12/1996		

Examiner Signature	Deborah Calamita	Date Considered	5/25/01

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Sheet 3 of 11

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Application Number	09/626,096
Filing Date	July 26, 2000
First Named Inventor	Umek, R.
Group Art Unit	1645
Examiner Name	Not Yet Assigned
Attorney Docket Number	A-68271-2/RFT/RMS/RMK

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NGC	53	5,780,234		Meade et al.	7/1998	
	54	5,824,473		Meade et al.	10/1998	
	55	5,851,772		Mirzabekov et al.	12/1998	
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	57	5,846,717		Brow et al.	12/1998	
	58	5,854,033		Lizasrdi	12/1998	

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Examiner Initials*	Cite No.[1]	Foreign Patent Document Office[3]	Number[4]	Kind Code[2] (*if known*)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]
NGC	59	WO	97/01646	A2	Univ. of N. Carolina	1/1997		
NGC	60	WO	97/44651	A1	AU Membrane and Biotech.	11/1997		
NGC	61	WO	97/27329	A1	Univ. of Chicago	7/1997		
NGC	62	WO	98/20162	A2	Clinical Micro ~~Systems~~ SENSORS	5/1998		
NGC	63	WO	98/27229	A1	Univ. of Chicago	6/1998		
NGC	64	WO	98/28444	A2	Univ. of Chicago	7/1998		
NGC	65	WO	98/35232	A2	Univ. of N. Carolina	8/1998		
NGC	66	WO	98/57159	A1	Clinical Micro ~~Systems~~ SENSORS	6/1997		
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NGC	69	WO	99/14596	A1	AB Sangtec Medical	3/1999		

Examiner Signature	Heather N. Calvert	Date Considered	5/25/04

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 4 of 11

Complete if Known	
Application Number	09/626,096
Filing Date	July 26, 2000
First Named Inventor	Umek, R.
Group Art Unit	1645
Examiner Name	Not Yet Assigned
Attorney Docket Number	A-68271-2/RFT/RMS/RMK

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
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Examiner Signature	Heather M Calamit	Date Considered	5/25/2004

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Sheet 5 of 11

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Application Number	09/626,096
Filing Date	July 26, 2000
First Named Inventor	Umek, R.
Group Art Unit	1645
Examiner Name	Not Yet Assigned
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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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HCC	87	Chang, I-Jy, et al., "High-Driving-Force Electron Transfer in Metalloproteins: Intramolecular Oxidation of Ferrocytochrome *c* by Ru(2,2'-bpy)$_2$(im)(His-33)$^{3+}$," *J. Am. Chem. Soc.*, 113:7056-7057 (1991).	
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Examiner Signature		Date Considered	5/25/04

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ACC	103	Durham, B., et al., "Photoinduced Electron-Transfer Kinetics of Singly Labeled Ruthenium Bis(bipyridin) Dicarboxybipyridine Cytochrome *c* Derivatives," *Biochemistry*, 28:8659-8665 (1989).	
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ACC	106	Farver, O., et al., "Long-range intramolecular electron transfer in azurins," *Proc. Natl. Acad. Sci. USA*, 86:6968-6972 (1989).	
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ACC	108	Fox, M. A., et al., "Light-Harvesting Polymer Systems," *C&EN*, pages 38-48 (March 15, 1993).	
ACC	109	Fox, L. S., et al., "Gaussian Free-Energy Dependence of Electron-Transfer Rates in Iridium Complexes," *Science*, 247:1069-1071 (1990).	
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ACC	113	Gardner, et al., "Application of conducting polymer technology in microsystems," *Sensors and Actuators*, A51:57-66 (1995).	
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Examiner Signature		Date Considered	5/25/2004

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Sheet	7	of	11	Attorney Docket Number	A-68271-2/RFT/RMS/RMK

Complete if Known	
Application Number	09/626,096
Filing Date	July 26, 2000
First Named Inventor	Umek, R.
Group Art Unit	1645
Examiner Name	Not Yet Assigned

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
ACC	12	Heller, A., "Electrical Wiring of Redox Enzymes," *Acc. Chem. Res.*, 23:128-134 (1990).	
HGC	121	Heller et al., "Fluorescent Energy Transfer Oligonucleotide Probes," *Fed. Proc.* 46(6):1968 (1987) Abstract No. 248.	
AGC	122	Heller, A., et al., "Amperometric biosensors based on three-dimensional hydrogel-forming epoxy networks," *Sensors and Actuators*, 13-14:180-183 (1993).	
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Examiner Signature		Date Considered	5/25/04

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Application Number	09/626,096
Filing Date	July 26, 2000
First Named Inventor	Umek, R.
Group Art Unit	1645
Examiner Name	Not Yet Assigned
Attorney Docket Number	A-68271-2/RFT/RMS/RMK

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AGC	137	Lenhard, J.R., et al., "Part VII Covalent Bonding of a Reversible- Electrode Reactanbt to Pt Electrodes Using an organosilane Reagent" *J. Electronal. Chem.*, 78:195-201 (1977).	
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Examiner Signature	Martha S. Calvert	Date Considered	5/25/04

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Sheet 9 of 11

	Complete if Known
Application Number	09/626,096
Filing Date	July 26, 2000
First Named Inventor	Umek, R.
Group Art Unit	1645
Examiner Name	Not Yet Assigned
Attorney Docket Number	A-68271-2/RFT/RMS/RMK

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AGC	154	Mucic et al., "DNA-Directed Synthesis of Binary Nanoparticle Network Materials," J. Am. Chem. Soc., 120:12674-12675 (1998).	
AGC	155	Murphy, C. J., et al., "Long-Range Photoinduced Electron Transfer Through a DNA Helix," *Science*, 262:1025-1029 (1993).	
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Examiner Signature	Heather M. Calamita	Date Considered	5/25/04

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Application Number	09/626,096
Filing Date	July 26, 2000
First Named Inventor	Umek, R.
Group Art Unit	1645
Examiner Name	Not Yet Assigned
Sheet 4 of 11	Attorney Docket Number A-68271-2/RFT/RMS/RMK

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	185	Turro, N., et al. "Photoelectron Transfer Between Molecules Adsorbed in Restricted Spaces," *Photochem. Convers. Storage Sol. Energy, Proc. Int. Conf., 8th,* pp 121-139 (1990).	
MGC	186	Uosake, K., et al., "A Self-Assembled Monolayer of Ferrocenylalkane Thiols on Gold as an Electron Mediator for the Reduction of Fe(III)-EDTA in Solution," *Electrochemica Acta.,* 36(11/12):1799-1801 (1991).	
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MGC	194	Xu, et al., "Immobilization of DNA on an Aluminum(III) alkaneobisphosphonate Thin Film with Electrogenerated Chemiluminescent Detection," *J. Am. Chem. Soc.,* 116:8386-8387 (1994).	
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HGC	171	Sigal et al., "A Self-Assembled Monolayer for the Binding and Study of Histidine-Tagged Proteins by Surface Plasmon Resonance," *Anal. Chem.*, 68(3):490-497 (1996).	
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HGC	181	Tour, "Conjugated Macromolecules of Precise Length and Constitution. Organic Synthesis for the Construction of Nanoarchitectures," *Chem. Rev.*, 96:537-553 (1996).	
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